

CLAIMS

What is claimed is:

- 5 1. A computerized advertisement distribution and delivery system for dynamically delivering advertisements for inclusion in an electronic document delivered to and stored at a recipient system, the computerized advertisement distribution and delivery system comprising:
 - advertisement image generation means for generating an image containing a plurality of advertisements related to a specific distribution subject based on a relationship between those
- 10 advertisements and storing that image in association with a network-based locator as being the up-to-date image for the specific distribution subject;
 - advertisement relationship determination means for intermittently determining relationships between advertisements related to a specific distribution subject and if an existing relationship between advertisements related to a specific distribution subject changes, initiating
- 15 the advertisement image generation means to generate a modified up-to-date image stored in association with the network-based locator and specific distribution subject;
 - electronic document transmission means for creating and transmitting an electronic document containing content related to a specific distribution subject and a network-based locator associated with the image generated by the advertisement image generation means for the
- 20 specific distribution subject; and
 - advertisement image transmission means for receiving a request for the image located at the network-based locator specified in the electronic document transmitted by the electronic document transmission means and transmitting the up-to-date image stored in association with the network-based locator at the time the request is received.

2. The computerized advertisement distribution and delivery system of claim 1 further comprising:

advertisement input receiving means for receiving at least one advertisement associated with a specific distribution subject and a bid representing an amount to be paid for click-throughs
5 by end-user recipients to a target site associated with the advertisement.

3. The computerized advertisement distribution and delivery system of claim 1 wherein the advertisement relationship determination means evaluates a grouping of advertisements based on the effective revenue efficiency of the grouping compared to other potential groupings of advertisements provided by advertisers for the specific distribution subject
10 and determines the relationship for generating an image using the highest revenue efficiency grouping of a predetermined number of advertisements.

4. The computerized advertisement distribution and delivery system of claim 2 wherein the relationship is determined based at least in part on the bid value of an advertisement for the specific distribution subject.

15 5. The advertisement distribution system of claim 1 wherein the advertisement relationship means generates a ranking of listings as a grouping, the grouping comprising the ranked list of advertisements with the highest effective cost per thousand impressions.

6. The advertisement distribution system of claim 3 wherein the revenue efficiency value is calculated by multiplying the number of click-throughs over a predetermined number of
20 impressions times the bid amount for the advertisement.

7. The computerized advertisement distribution and delivery system of claim 1 wherein the advertisement relationship determination means determines relationships when any new bid value of an advertisement related to a specific distribution subject is input.

8. The computerized advertisement distribution and delivery system of claim 3
5 wherein the advertisement relationship determination means determines relationships when revenue efficiency calculations are made.

9. The computerized advertisement distribution and delivery system of claim 1
wherein the electronic document comprises a target network-based locator for each of a plurality
of advertisements included in the image and further comprising a redirection server for receiving
10 a request at the target network-based location and redirecting the request to a location associated
with the advertisement associated with the target network-based locator in the electronic
document.

10. A computerized advertisement distribution and delivery method for dynamically
delivering advertisements for inclusion in an electronic document delivered to and stored at a
15 recipient system, the method comprising the steps of:

receiving and storing at least one advertisement associated with a specific distribution
subject and a bid representing an amount to be paid for click-throughs by end-user recipients to a
target site associated with the advertisement;

generating an image containing a plurality of advertisements related to a specific
20 distribution subject based on a relationship between those advertisements and storing that image
in association with a network-based locator as being the up-to-date image for the specific
distribution subject;

intermittently determining relationships between advertisements related to a specific distribution subject changes, generating a modified up-to-date image stored in association with the network-based locator and specific distribution subject;

- 5 creating and transmitting an electronic document containing content related to a specific distribution subject and a network-based locator associated with an image generated by the preferred advertisement image generation means; and
- receiving a request for an image located at the network-based locator specified in the electronic document transmitted in the electronic document transmission step and transmitting the image stored in association with the network-based locator at the time the request is received.

10 11. The method of claim 10 further comprising the step of:

receiving and storing at least one advertisement associated with a specific distribution subject and a bid representing an amount to be paid for click-throughs by end-user recipients to a target site associated with the advertisement.

12. The method of claim 10 further wherein the step of determining relationships evaluates a grouping of advertisements based on the effective revenue efficiency of the grouping compared to other potential groupings of advertisements provided by advertisers for the specific distribution subject and determines the relationship for generating an image using the highest revenue efficiency grouping of a predetermined number of advertisements.

13. The method of claim 12 wherein the relationship is determined based at least in part on the bid value of an advertisement for the specific distribution subject.

14. The method of claim 10 further comprising the step of generating a ranking of listings as a grouping, the grouping comprising the ranked list of advertisements with the highest

effective cost per thousand impressions to be used to determine the relationships between the advertisements.

15. The method of claim 12 wherein the revenue efficiency value is calculated by multiplying the number of click-throughs over a predetermined number of impressions times the
5 bid amount for the advertisement.

16. The method of claim 12 wherein the relationships between advertisements are determined when any new bid value of an advertisement related to a specific distribution subject is input.

17. The method of claim 12 wherein the relationships between advertisements are
10 determined when revenue efficiency calculations are made.

18. The method of claim 12 wherein the electronic document comprises a target network-based locator for each of a plurality of advertisements included in the image and further comprising the step of receiving a request at the target network-based location and redirecting the request to a location associated with the advertisement associated with the target network-
15 based locator in the electronic document.

19. An electronic document provided in an interpreted language, the document comprising:

program interpreted code for instructing a recipient program to present content related to a specific distribution topic in a page when the electronic document is opened by the recipient
20 program;

- program interpreted code for instructing the recipient program to retrieve an image from a source network-based location and present that image in the page with the content related to the specific distribution topic when the electronic document is opened by the recipient program;
- program interpreted code for instructing the recipient program to request a first web page
- 5 from a first target network-based locator when a first portion of the image is selected;
- program interpreted code for instructing the recipient program to request a second web page from a second target network-based locator when a second portion of the image is selected; and
- wherein the first and second target network-based locators direct the recipient program to
- 10 a location on the network where a first and second advertiser web page location respectively are stored.
20. The electronic document of claim 19 wherein the source network-based locator comprises a URL with an identifier related to the specific distribution subject.
21. The electronic document of claim 19 wherein the first and second target network-based locators comprises an address portion and a variable portion and wherein the address portion of the first and second target network-based locators is the same.
22. A computerized advertisement distribution and delivery system for dynamically delivering advertisements for inclusion in an electronic document delivered to and stored at a recipient system, the computerized advertisement distribution and delivery system comprising:
- 20 advertisement image generation means for generating a plurality of images corresponding to a specific distribution subject, ordering those plurality of images based on a relationship between those advertisements and storing those images in association with a plurality of

network-based locators as being the up-to-date image grouping for the specific distribution subject;

advertisement relationship determination means for intermittently determining relationships between advertisements related to a specific distribution subject and if an existing relationship between advertisements related to a specific distribution subject changes, initiating the advertisement image generation means to reorder the images and store the reordering information to generate a up-to-date image grouping stored in association with the plurality of network-based locators and specific distribution subject;

- electronic document transmission means for creating and transmitting an electronic document containing content related to a specific distribution subject and at least two of the plurality of network-based locators associated with the up-to-date grouping of images generated by the advertisement image generation means for the specific distribution subject; and
- advertisement image transmission means for receiving a request for the up-to-date images located at the at least two of the plurality of network-based locators specified in the electronic document transmitted by the electronic document transmission means and transmitting the up-to-date images associated with the plurality of network-based locators stored in association with the network-based locator at the time the request is received.

23. The computerized advertisement distribution and delivery system of claim 22 further comprising:

- 20 advertisement input receiving means for receiving at least one advertisement associated with a specific distribution subject and a bid representing an amount to be paid for click-throughs by end-user recipients to a target site associated with the advertisement.

24. The computerized advertisement distribution and delivery system of claim 22 wherein the advertisement relationship determination means evaluates a grouping of advertisements based on the effective revenue efficiency of the grouping compared to other potential groupings of advertisements provided by advertisers for the specific distribution subject 5 and determines the relationship for generating the up-to-date image grouping using the highest revenue efficiency grouping of a predetermined number of advertisements.
25. The computerized advertisement distribution and delivery system of claim 22 wherein the relationship is determined based at least in part on the bid value of an advertisement for the specific distribution subject.
- 10 26. The advertisement distribution system of claim 22 wherein the advertisement relationship means generates a ranking of listings as a grouping, the grouping comprising the ranked list of advertisements with the highest effective cost per thousand impressions.
27. The advertisement distribution system of claim 25 wherein the revenue efficiency value is calculated by multiplying the number of click-throughs over a predetermined number of 15 impressions times the bid amount for the advertisement.
28. The computerized advertisement distribution and delivery system of claim 22 wherein the advertisement relationship determination means determines relationships when any new bid value of an advertisement related to a specific distribution subject is input.
29. The computerized advertisement distribution and delivery system of claim 25 20 wherein the advertisement relationship determination means determines relationships when revenue efficiency calculations are made.

30. The computerized advertisement distribution and delivery system of claim 22 wherein the electronic document comprises a target network-based locator for each of a plurality of advertisements included in the image and further comprising a redirection server for receiving a request at the target network-based location and redirecting the request to a location associated
5 with the advertisement associated with the target network-based locator in the electronic document.